

Title (en)  
AIR FILTER UNIT AND AIR CONDITIONER

Title (de)  
LUFTFILTEREINHEIT UND KLIMAANLAGE

Title (fr)  
UNITÉ DE FILTRE À AIR ET CLIMATISEUR

Publication  
**EP 3816526 A4 20220302 (EN)**

Application  
**EP 19824618 A 20190626**

Priority  
• JP 2018124265 A 20180629  
• JP 2019025479 W 20190626

Abstract (en)  
[origin: EP3816526A1] An air conditioner of the present disclosure includes a fan filter unit whose power consumption efficiency determined by the following equation is  $600 \text{ kWh}/(\text{m}^2 \cdot \text{yr})$  or less when the fan filter unit is operated in such a manner that blowing efficiency  $\eta$  of a fan is 0.75. In the following equation,  $Q$  represents a nominal flow rate ( $\text{m}^3/\text{sec}$ ) of an air filter unit,  $\Delta P$  represents a pressure loss (Pa) of the air filter unit measured when air passes through the air filter unit at the nominal flow rate of the unit, and  $S$  represents an opening area ( $\text{m}^2$ ) of the air filter unit. Equation: power consumption efficiency  $\text{kWh}/(\text{m}^2 \cdot \text{yr}) = \{(Q \times \Delta P)/(\eta \times 1000)\} \times (24 \times 365)/S$ . The air conditioner of the present disclosure is suitable for reducing power consumption even when including the air filter unit which is large in size and has high filtration performance. An air filter unit of the present disclosure is suitable for the air conditioner of the present disclosure.

IPC 8 full level  
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CPC (source: EP KR US)  
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Citation (search report)  
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• See also references of WO 2020004504A1

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